

ABSTRACT

5 A motion-based system includes one or more passenger units, gimbaled about three axes, movably attached to arms or slots in a planar system extending radially from a central hub. The passenger units may be positioned along the arms any distance from the central hub thereby providing means for varying forces to be exerted thereon while maintaining a constant rotational speed. The mobile passenger units further provide means for loading and unloading subjects during operation of the system. The means includes passenger units being moved to the central hub location where they are disengaged from the rotating system and safely loaded and unloaded. Computers control the rotational speed of the system and the movements of the passenger units about at least three axes based on inputted or real-time data. The data can simulate real events, be arbitrarily developed or be based on real time events. The motion-based system has both training and amusement purposes.

motionapparatus.final.021704